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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,109	03/24/2004	Susumu Kashiwase	848075/0077	4170
29619 7590 12/17/2007 SCHULTE ROTH & ZABEL LLP ATTN: JOEL E. LUTZKER 919 THIRD AVENUE NEW YORK, NY 10022			EXAMINER YUN, EUGENE	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 12/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/808,109

Applicant(s)

KASHIWASE, SUSUMU

Examiner

Eugene Yun

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Takai (US 6,509,865).

Referring to Claim 1, Takai teaches a wireless communication apparatus, that communicates with a base station, comprising:

An adaptive antenna (see col. 3, lines 11-14);

A receiving portion for receiving a control signal, to control directivity of said adaptive antenna, transmitted from said base station (see col. 3, lines 20-24); and

A control portion for controlling the directivity of said adaptive antenna to be a beam steering or a null steering based on the control signal (see col. 3, lines 15-18).

Referring to Claim 2, Takai also teaches said control portion controlling the directivity of said adaptive antenna by changing weighting of the beam steering and the null steering of said adaptive antenna (see col. 3, lines 40-52).

Referring to Claim 3, Takai also teaches said control portion controlling the directivity of said adaptive antenna every frequency used by said wireless communication apparatus (see col. 7, lines 8-15).

Referring to Claim 4, Takai also teaches a receiving quality monitoring portion for monitoring quality of a signal from said base station (see col. 12, lines 35-40); and

A quality information transmitting portion for transmitting information about quality of a receiving signal monitored by said receiving quality monitoring portion to said base station (see col. 12, lines 40-44),

Wherein said control portion controls the directivity of said adaptive antenna based on the control signal which said base station calculates based on the quality information (see col. 12, lines 45-52).

Referring to Claim 5, Takai also teaches controlling the directivity of said adaptive antenna based on the control signal which said base station produces according to the number of wireless communication apparatuses connected to said base station (see col. 3, lines 53-64).

Referring to Claim 6, Takai also teaches controlling the directivity of said adaptive antenna based on the control signal which said base station produces according to the amount of communication in said base station (see col. 3, lines 53-64).

Referring to Claim 7, Takai also teaches a battery remaining amount detection portion for detecting a remaining amount of a battery powering said wireless communication apparatus, wherein said control portion stops the control of the directivity of said adaptive antenna based on a result of comparison between a predetermined threshold value and the remaining amount of said battery detected by said battery remaining amount detection portion (see col. 11, lines 20-30).

***Response to Arguments***

3. Applicant's arguments filed 9/28/2007 have been fully considered but they are not persuasive.

The applicant argues that the Takai reference does not teach "a wireless communication apparatus having an adaptive antenna and a control signal that is transmitted from the base station to a receiving portion of the wireless communication apparatus". The applicant further argues that in Takai, the antenna array is coupled to the base station and therefore, differs from the wireless communication apparatus in claim 1. However, the claim simply states "a wireless communication apparatus", and does not state anything about whether or not it includes a base station, which means that the examiner can interpret the term as any portion of any device which is capable of wireless communications. Furthermore, the claim does not state that the wireless communication apparatus communicates with the base station by wireless means, meaning that the examiner can assume a wireline connection between the wireless communication means and the base station. Therefore, the examiner can equate the antenna array itself as the wireless communication apparatus and the base station coupled to the antenna array as the base station. This interpretation by the examiner of the Takai reference is believed to be sufficient to cover every limitation of claim 1 as currently written and therefore, the examiner stands by his rejection.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Eugene Yun  
Examiner  
Art Unit 2618

EY

  
MATTHEW ANDERSON  
SUPERVISORY PATENT EXAMINER